

## CLAIMS

1. A method for applying information to a medical slide or histology cassette, wherein a printing medium is applied directly onto a surface portion of a slide or cassette to define an organised array of printed data, the printing medium being sealable onto said surface portion of the slide or cassette so that said organised array of printed data is proof against removal or damage during subsequent handling or treatment of the slide or cassette.
2. A method according to Claim 1, wherein the printing medium comprises at least a solvent and a vinyl resin.
3. A method according to Claim 1, wherein the printing medium is directly sealable to said surface portion of the slide or cassette.
4. A method according to Claim 3, wherein the printing medium comprises at least a solvent and a vinyl resin.
5. A method according to Claim 1, wherein the printing medium is sealable to said surface portion of the slide or cassette by application of a coating agent or medium to said surface portion of the slide or cassette so as to cover said organised array of printed data.
6. Apparatus for applying information to a medical slide or histology cassette, comprising means for applying a printing medium directly onto a surface portion of a slide or cassette to define an organised array of printed data, the printing medium being sealable onto said surface portion of the slide or cassette so that said organised array of printed data is proof against removal or damage during subsequent handling or treatment of the slide or cassette.
7. Apparatus according to Claim 5, comprising means for effecting sealing of said organised array of printed data onto said surface portion of the slide or cassette.
8. Apparatus according to Claim 5, wherein said sealing effecting means applies a coating agent or medium to said surface portion of the slide or cassette so as to cover said organised array of printed data.

(a) storage means for holding a multiplicity of slides onto which data is to be printed,  
(b) a printing station for applying data to a selected slide,  
(c) transport means for conveying a slide onto which data is to be printed from the slide storage means to the slide printing station and for conveying a slide onto which data has been printed from the slide printing station to a slide discharge location,  
(d) means for selectively enabling conveyance of a slide from the slide storage means to the slide discharge location and  
(e) means for enabling input of data to be printed onto a selected slide during said conveyance.

- (a) storage means for holding a multiplicity of cassettes onto which data is to be printed,
- (b) a printing station for applying data to a selected cassette,
- (c) transport means for conveying a cassette onto which data is to be printed from the cassette storage means to the cassette printing station and for conveying a cassette onto which data has been printed from the cassette printing station to a cassette discharge location,
- (d) means for selectively enabling conveyance of a cassette from the cassette storage means to the cassette discharge location, and
- (e) means for enabling input of data to be printed onto a selected cassette during said conveyance.

- (a) storage means for holding a multiplicity of slides onto which data is to be printed,
- (b) storage means for holding a multiplicity of cassettes onto which data is to be printed,
- (c) a printing station for applying data to a selected slide,
- (d) a printing station for applying data to a selected cassette,

(e) transport means for conveying a slide onto which data is to be printed from the slide storage means to the slide printing station and for conveying a slide onto which data has been printed from the slide printing station to a slide discharge location,

(f) transport means for conveying a cassette onto which data is to be printed from the cassette storage means to the cassette printing station and for conveying a cassette onto which data has been printed from the cassette printing station to a cassette discharge location,

(g) means for selectively enabling conveyance of a slide or a cassette from the respective storage means to the respective discharge location, and

(h) means for enabling input of data to be printed onto a selected slide or cassette during said conveyance.

13. Apparatus according to Claim 12, wherein each storage means has a plurality of compartments for respective accommodation of slides or cassettes.

14. Apparatus according to Claim 13, wherein each storage means is of generally cylindrical configuration and is mounted for rotation about a substantially vertical axis so that each compartment is selectively alignable with a respective transport means for selective conveyance of a slide or cassette.

15. Apparatus according to Claim 14, comprising respective drive means, such as stepper motors, for respective rotation of the storage means between a series of positions of alignment with the respective transport means.

16. Apparatus according to Claim 12, wherein each transport means comprises at least one belt disposed for pick-up of a slide or a cassette from the respective storage means and driving movement of the slide or cassette to the respective discharge location.

17. Apparatus according to Claim 16, comprising respective drive means, such as stepper motors, for drive of the respective transport means.

18. Apparatus according to Claim 12, wherein the respective printing stations are located adjacent to the path of travel of a slide or cassette during conveyance of the slide or cassette by the respective transport means.

19. Apparatus according to Claim 12, comprising a control system having a multiplicity of sensors for detecting progressive movement of slides or cassettes through the apparatus, and for initiating and terminating drive of the transport means and actuating printing and optionally other processing steps in response to signals from said sensors.

20. Apparatus for printing data onto a medical slide or histology cassette comprising:

- (a) storage means for holding a multiplicity of slides onto which data is to be printed,
- (b) storage means for holding a multiplicity of cassettes onto which data is to be printed,
- (c) a printing station for applying data to a selected slide,
- (d) a printing station for applying data to a selected cassette,
- (e) transport means for conveying a slide onto which data is to be printed from the slide storage means to the slide printing station and for conveying a slide onto which data has been printed from the slide printing station to a slide discharge location,
- (f) transport means for conveying a cassette onto which data is to be printed from the cassette storage means to the cassette printing station and for conveying a cassette onto which data has been printed from the cassette printing station to a cassette discharge location,
- (g) means for selectively enabling conveyance of a slide or a cassette from the respective storage means to the respective discharge location, and
- (h) means for enabling input of data to be printed onto a selected slide or cassette during said conveyance.